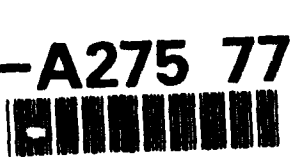

CONTRACTOR LOGISTICS SUPPORT (CLS) COST FACTORS DEVELOPMENT

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CONTRACTOR LOGISTICS SUPPORT (CLS) COST FACTOR DEVELOPMENT

CLS is a method of providing maintenance support to particular Air Force (AF) aircraft. All AF aircraft using CLS are managed at the Oklahoma City Air Logistics Center (OC-ALC). Many of these aircraft are very similar to commercial aircraft and are maintained in accordance with Federal Aviation Administration (FAA) guidance. OC-ALC Cost Analysis builds the cost factors that are published in AFR 173-13 and are used in the Air Staff's ABIDES system for what-if analyses. Since these aircraft are peculiar to OC-ALC, many in the cost community are unaware that they exist.

This topic pertains to the upcoming DoD Cost Analysis Symposium theme of Advancing the State-of-the-Art In Cost Analysis because the methodology used to develop these factors is continually being refined to meet the Air Staff's changing needs. More attention is being paid to the level of support documentation supplied with these factors to allow decision makers to better interpret what is included. Each CLS aircraft is unique, and no one standard methodology exists for their development. This presentation will provide further insight into one of the Air Force unique activities provided by an ALC.

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CONTRACTOR LOGISTICS SUPPORT (CLS) COST FACTORS DEVELOPMENT

Introduction

This paper presents the process involved in the development of CLS Cost factors. These factors are published on a yearly basis in AFR 173-13, US Air Force Cost and Planning Factors. They are also used in the Automated Budget Integrated Data Environment System (ABIDES) database at the SAF/FMC level. The ABIDES system is the Air Staff's overall planning tool. The CLS factors developed by the Oklahoma City Air Logistics Center/Financial Management Directorate, Cost Analysis Section (OC-ALC/FMPSC) are used to realign flying hour programs, and/or the number of aircraft supported. They are also used in "what-if" scenarios to support management decisions.

Background

Since this method of logistics support is unique to OC-ALC, many in the cost community are not familiar with some of the peculiarities of this method of support. As this paper progresses, some of the difficulties encountered when developing these factors will become evident. Hopefully, the reader will gain a better understanding of the uniqueness of CLS.

What is CLS? The United States Joint Command Contractor Logistics Support Guide defines CLS as follows:

> A preplanned method used to provide all or part of the logistics support to a system, subsystem, modification, or equipment throughout its entire lifecycle. CLS includes the functions normally performed by the logistics center, including functions such as, item management, repair, replenishment, distribution, transportation, etc. An item requiring contract repair only and that has a logistics center infrastructure, supporting the balance of the necessary functions is contract DPEM [Depot Purchased Equipment Maintenance]. ICS [Interim Contractor Support] and Contract DPEM are excluded from CLS. Also, CLS items are excluded from the Repair Stock Division (RSD) [Reparable Stock Division].

According to AFR 800-21, CLS is usually applied to "commercial off-the-shelf systems or equipment, those with small inventories, those subject to rapid technical obsolescence, or those that do not operate from a combat area". The platforms covered under the CLS Cost Factors developed by OC-ALC/FMPSC tend to fall under those with small inventories, or those not operating from a combat area.

CLS levels of support vary greatly depending on how a particular platform's CLS contract is written. In their call for

information, the writer's of the United States Air Force Joint Command Contractor Logistics Support Guide state:

> As we researched for information for the guide, we found that CLS is so diversified that no two programs were alike, and therefore, there were no standard acquisition programs or follow-on support contracts. Regulatory guidance allows for this diversity because of each system's unique mission and economic considerations.

Oklahoma City Air Logistics Center (OC-ALC) is unique to the Air Force since it manages all AF CLS aircraft. This was not always the case. At one time, CLS weapon systems were managed from Air Logistics Centers scattered around the Continental United States (CONUS). In FY89, management responsibility for all assets was transferred to OC-ALC. In addition to these AF operated assets, OC-ALC also manages Air Force Reserve, Air National Guard, Army, and Navy weapon systems using CLS.

Because of this consolidation of management responsibility, OC-ALC/FMPSC (Cost Analysis) has become the Office of Primary Responsibility for CLS Cost Factors. Before FY90, HQ AFMC (AFLC at the time) developed these factors and developed a macro driven spreadsheet to aid the development of the factors. One difficulty HQ AFMC encountered in developing CLS Cost Factors was with the physical distance between them and the ALC from which they gathered their data. This problem is now resolved since all assets are at OC-ALC.

Types of Factors

There are four types of factors developed for each fiscal year stated in some specified base year dollars. Annually, factors are developed for a period of seven years. The four factors are Cost Per Flying Hour (CPFH), Cost Per Aircraft (CPA), CPFH Life Cycle Cost (LCC) Factor, and CPA LCC Factor.

CPFH Factor: The CPFH factor represents that portion of the CLS estimate that is flying hour related. The CPFH factor is used to realign resources based upon a change in the overall flying hour program. OC-ALC/FMPSC includes only those costs directly related to flying an aircraft as stated in the CLS contract in the calculation of these factors. They are defined as variable costs and are stated in the CLS contract on a flying hour basis. Many maintenance actions, such as engine inspections and overhauls are driven by flying hours, but they are not included in the calculation of these factors. Those costs are used in the calculation of the CPA factor.

CPA Factor: The CPA factor represents the portion of the CLS estimate that is non-flying hour related as stated in the contract. The CPA factor is used to realign resources based upon

a change in the number of aircraft supported. OC-ALC/FMPSC defines those costs used to calculate CPA as being fixed costs.

CPFH LCC Factor: The CPFH LCC factor includes costs that are defined as variable and are directly related to flying time as stated in the CLS contract. It is calculated by taking the weighted average CPFH for FY93 and prior years (using this year's factor development as an example), multiplying by the average age of the aircraft (supplied by SAF/FMC), and then adding the weighted average CPFH from FY94-00 multiplied by the expected useful life minus average age of aircraft. This sum was then divided by the expected useful life per aircraft (assumed to be 25 for this analysis), to yield the LCC CPFH.

CPA LCC Factor: The CPA LCC factor was developed using the same general methodology as the CPFH LCC with the exception that CPFH is replaced with CPA.

Factor Development Process

The requirement for these factors is driven annually by SAF/FMC. A written tasking is sent asking that new factors be developed for inclusion in the next update of AFR 173-13. Three attachments are prepared, Attachment A6-1 Contractor Logistics Support Cost Factors for the next FY, Attachment A7-1 Contractor Logistics Support Cost Factors for the year after A6-1, and Attachment A9-1 Contractor Logistics Support Life Cycle Cost Factors. Each year's factors are rebased to a given year dollars. The most recent submission stated all factors in FY94$.

Once this tasking is received, OC-ALC/FMPSC contacts the local CLS Division (OC-ALC/LAA) for points of contact for those Air Force weapon systems funded with Appropriation 3400, Element of Expense/Investment Code (EEIC) 578, and/or Defense Business Operating Funds (DBOF). The exact number of platforms supported with these type of funds can fluctuate as was the case with this year's submission. This year the C-23 platform is funded with 3600 funds and was not included in the CLS Factor development package.

Analysts from OC-ALC/FMPSC meet with the applicable Program Managers (PMs) and discuss their budget inputs. Most are derived straight from the current CLS contract and some portions of the budget inputs are based on past experience. The number of budget line items varies for each platform. A platform like the KC-10 has 17 budget line items while the E-9A has 5. Thus, the one on one interface between FMPSC and LAA becomes crucial in understanding each platform's costs.

From this one on one interface, FMPSC analysts define those specific costs as being fixed or variable. This determination results in some platforms like the C-9A, C-9C, C-27A, E-4B, C-20A/B, and VC-137 having a CPFH of zero. This results from the way these platform's contracts are written whereby no contract cost is explicitly driven by flying the aircraft. Other platforms like the T-1A, E-9A, KC-10A, C-12C/D, C-12F, C-21A,

VC-25A, and T/CT-43A, have contracts which charge a rate per flying hour and do have CPFH factors.

Meeting with the PMs is only one step in the factor development process. FMPSC basically documents the budget inputs, showing numbers of inspections scheduled, costs per inspection, etc. to allow the reader of the documentation to understand how each platform's factors were developed. In addition to this documentation, the analyst needs to become an expert in how the budget was put together to be able to explain why numbers for one year's submission might be different from the previous year's submission. This is a major focus of the tasking received from SAF/FMC. These differences help explain budgetary variances so it is imperative that adequate explanation is included in the package submitted.

In some instances, the variances in factors can be quite large. This results from increased requirements being placed on the platforms by the using commands, a change in mission requirements necessitating an increase/decrease in flying hour programs, a new contract being awarded with new CLS requirements, an increase/decrease in the number of platforms being supported, or in some instances, a mistake being made in the previous year's factor development. The first four points above are not readily controllable by FMPSC, the fifth one is.

For example, during last year's factor development, it was assumed that certain aircraft were operating under a CLS contract whereby a minimum number of flying hours were guaranteed to the contract. This basically means that even if the AF did not fly a platform in a given month, the contractor would still be paid for x number of hours. Once x hours were flown, a variable type arrangement takes over where the AF pays a rate for each additional hour over x. However, it was discovered that the new CLS contracts were not written like the old ones and if the AF didn't fly that platform in a given month, then the AF didn't pay the flying hour charge. The impact of this mistake was that in last year's factor package, aircraft were being shown with a CPFH of zero when in fact there were variable costs as defined by FMPSC and a CPFH should have been developed. These are the types of things that must be explained in the factor package to allow easy understanding.

Once the factor documentation is developed, it is circulated back to the PMs for their review. This step is vital because FMPSC does not want to assume something that isn't necessarily true. In most instances, the PMs concur with the factors as is. However, if a disagreement occurs, the cost analyst and PM sit down and discuss what must be done to accurately portray costs. The working relationship now is a good one. However, the first time FMPSC developed these factors, the PMs looked upon the cost analysts as almost being auditors. As time has gone on and the factors have been developed for a few years, this relationship has gotten better. The PMs have gotten use to FMPSC asking questions about their budgets and have put more thought into the

process because they know they will be asked to explain what they did. The reason for this is that FMPSC solicits comments and

does not go forward with the factors until some level of agreement can be reached with the PMs.

The PMs still have problems with the way FMPSC defines fixed and variable costs, but now with each attachment to AFR 173-13, a notes section is included defining FMPSC's fixed and variable costs and which costs are used in which factor. This has helped ease some of the PMs' concerns.

Once the PMs have reviewed the proposed factors, they are forwarded to the CLS Division (OC-ALC/LAA) for coordination. At this time, a briefing is made available to OC-ALC/LAA where the methodology and actual factors are discussed. This briefing allows FMPSC to show how the PMs' inputs were used to develop the CLS Cost Factors. It also allows FMPSC to discuss why factors this year might be different than last year. This briefing acts as a final screening process before the factors are signed for submission to SAF/FMC.

In previous submissions to SAF/FMC, a paper copy has been forwarded for their review and then the factors were updated on the Cost Bulletin Board. This year, OC-ALC/FMPSC will be briefing the development of these factors and the factors themselves to the Air Force Cost Analysis Improvement Group (AFCAIG). It seems that SAF/FMC has been receiving questions about the factors even though they did not develop them. Attendance at the AFCAIG will allow all parties to hear first hand how the factors were developed and what they are to be used for. This will hopefully clear up any misunderstanding that has resulted in the past.

Once the AFCAIG agrees to the factors, they are updated on the Cost Bulletin Board. The process doesn't end with publication on the Cost Bulletin Board. Throughout the year, OC-ALC/FMPSC receives phone calls from people wanting to know specifics about some particular platform's factors. If the information isn't readily available in FMPSC's cost library, the PMs are contacted and an answer is developed. The number of calls increases each year as more people become concerned about the smaller Defense Budget. This is good because it is important that those using the factors understand the specific platform's assumptions. These assumptions are not communicated by the Cost Bulletin Board.

Many of the CPFH factors are dependent on a set flying hour program as given by USAF/XOOT. If the number of hours deviates significantly from what was used in the calculation of CPFH, a different contract rate might take effect at which time a new CPFH might be more appropriate. FMPSC stresses that the CPFH is not Total Cost ÷ Flying Hours but rather:

$$\text{CPFH} = \text{Variable Cost} \div \text{Flying Hours}$$

and CPA is not Total Cost ÷ Number of Aircraft but rather:

CPA = Fixed Cost ÷ Number of Aircraft.

Each platform is different and the users of these factors need to realize that straight forward cross comparisons between two platforms is not easy because of the differences in CLS contracts and the levels of support provided. These points are addressed further in the notes accompanying the Attachments in AFR 173-13.

Comparison of Factors

This section highlights the yearly differences encountered when developing these factors. It also highlights the impact of analyst assumptions, changing schedules, and changing requirements. Comparisons are made between last year's CPFH and CPA factors (restated in FY94$) and this year's CPFH and CPA factors. This information was taken from Attachment A6-1, AFR 173-13, dated 22 May 92 for last year's factors, and the CLS Documentation package developed for the FY93 CLS Factor submission. Both sets of factors were developed by OC-ALC/FMPSC.

Before proceeding, one reason for the variations will be addressed. Last year (FY92), analysts from OC-ALC/FMPSC used OSD Weighted Inflation Indices to rebase the PM budgets to Base Year 93$. This year (FY93), OSD Raw Inflation Indices were used to rebase the PM budgets to FY94$. The rationale for this change was that after consulting with the local budget office and CLS budget personnel, it was discovered that CLS 3400 funds are one year funds with no outlay pattern. A call was made to SAF/FMC to better understand which indices should be used for CLS funds. SAF/FMC's explanation was that a weighted inflation index exists for 3400 funds because some things like minor construction do have an outlay pattern. But since CLS did not have this outlay pattern, raw indices were more appropriate.

CPFH Comparison

Table 1 compares the FY92 CPFH Factors and FY93 CPFH Factors for FY94. All factors have been stated in FY94$. Detailed explanations of each factor's variations can be found in the CLS Documentation submitted to SAF/FMC in June 1993. Major methodology differences will be briefly explained to emphasize the way CLS costs can change for a given platform.

TABLE 1
COMPARISON OF FY92 AND FY93 CPFH FACTORS

MDS	FY92 CPFH	FY93 CPFH
T-1A	$85	$88
E-4B	$0	$0
C-9A	$0	$0
C-9C	$0	$0
E-9A	$594	$1,357
KC-10A	$472	$463
C-12C/D	$0	$234
C-12F	$189	$186
C-20A/B	$0	$0
C-21A	$154	$192
C-23A	$271	N/A
VC-25A	$3,871	$3,769
C-27A	$0	$0
T/CT-43A	$234	$242
C-137B/C	$0	$0

Notice the C-12C/D CPFH Factors. In the FY92 development of these factors, the assumption was made that the new CLS contract would be like the old CLS contract whereby a minimum number of hours per month were guaranteed to the contractor whether or not the AF flew the aircraft in that month. Since the projected flying hour program supplied by USAF/XOOT did not exceed this monthly total, variable costs, as defined by FMPSC, did not occur. This resulted in a CPFH of zero. The new CLS contract is written with a variable rate for one hour and up. Variable costs result and a CPFH was developed.

Care must be taken when using any of the above factors. No two CLS contracts are exactly the same and the factors developed are all based on different flying hour programs and maintenance schedules depending on the year of development. Thus, the factors change and the user needs to understand why they change. Comparisons of one platform to another are not advised since the levels of CLS support range from all three levels of maintenance (Organizational, Intermediate, Depot) to one level of support. Different lines are included in each CLS contract and what might

have appeared as an Over and Above item in one CLS contract might be broken out separately in a different CLS contract.

CPFH LCC Factor Comparison

Table 2 compares the FY92 CPFH LCC Factors and FY93 CPFH LCC Factors for FY94. All factors have been stated in FY94$. Detailed explanations of each factor's variations can be found in the CLS Documentation submitted to SAF/FMC in June 1993. Major methodology differences will be briefly explained to emphasize the way CLS costs can change for a given platform.

TABLE 2
COMPARISON OF FY92 AND FY93 CPFH LCC FACTORS

MDS	FY92 CPFH LCC FACTOR	FY93 CPFH LCC FACTOR
T-1A	$98	$115
E-4B	$0	$0
C-9A	$0	$0
C-9C	$0	$0
E-9A	$766	$1,356
KC-10A	$567	$582
C-12C/D	$38	$292
C-12F	$242	$193
C-20A/B	$167	$164
C-21A	$200	$213
C-23A	$295	N/A
VC-25A	$4,348	$3,938
C-27A	$87	$12
T/CT-43A	$223	$225
C-137B/C	$0	$0

The table above is shown to highlight the fact that while one platform might not have any variable costs stated in its current CLS contract, at one time it may have had them stated. Take the C-20 platform. Looking at Table 1 on page 7, the CPFH for the C-20 is zero. However, the CPFH LCC Factor is calculated. Since the CPFH LCC Factor is a weighted average of prior year CPFHs and future year CPFH (see the definitions of

these factors for a more thorough description), the C-20 platform at one time in the past did have a variable flying hour rate in its contract. Contracts change as well as requirements and projected flying hours. All of these must be considered on a yearly basis when developing these factors.

CPA Comparison

The following table compares the FY92 CPA Factors and FY93 CPA Factors for FY94. All factors have been stated in FY94$. Detailed explanations of each factor's variations can be found in the CLS Documentation submitted to SAF/FMC in June 1993. Major methodology differences will be briefly explained to emphasize the way CLS costs can change for a given platform.

TABLE 3
COMPARISON OF FY92 AND FY93 CPA FACTORS

MDS	FY92 CPA	FY93 CPA
T-1A	$72,792	$92,476
E-4B	$8,861,816	$9,421,696
C-9A	$2,323,001	$2,720,095
C-9C	$2,557,208	$2,451,561
E-9A	$549,536	$729,500
KC-10A	$1,145,967	$1,813,093
C-12C/D	$477,394	$232,571
C-12F	$263,068	$369,755
C-20A/B	$1,553,461	$1,934,445
C-21A	$344,195	$237,536
C-23A	$187,769	N/A
VC-25A	$10,931,200	$16,253,500
C-27A	$1,600,087	$1,598,436
T/CT-43A	$1,659,744	$1,287,000
C-137B/C	$4,203,060	$5,339,862

Table 3 is shown to highlight how fixed costs can fluctuate from submission of the CLS Factors to the next. For all the platforms listed above except the T-1A (which is still being procured and whose numbers fluctuate through FY97), the C-12C/D (which included those aircraft operated by DSAA and DIA in FY93

to better reflect total costs), and the T/CT-43A (which includes 10 additional ATC aircraft costs which were mistakenly left out of last year's factors), the changes in factors are driven by changing requirements. CPA is calculated by taking total fixed costs divided by the number of aircraft. Maintenance schedules change to reflect expected requirements. New contracts are expected which include items not currently covered (the new VC-25A contract will have a PDM cost). And if errors were made in calculating the CPFH as was the case with the C-12C/D, costs that should have been variable are included in the fixed costs which drive up the CPA Factors.

CPA LCC Factor Comparison

Table 4 compares the FY92 CPA LCC Factors and FY93 CPA LCC Factors for FY94. All factors have been stated in FY94$. Detailed explanations of each factor's variations can be found in the CLS Documentation submitted to SAF/FMC in June 1993. Major methodology differences will be briefly explained to emphasize the way CLS costs can change for a given platform.

TABLE 4
COMPARISON OF FY92 AND FY93 CPA LCC FACTORS

MDS	FY92 CPA LCC FACTOR	FY93 CPA LCC FACTOR
T-1A	$86,835	$117,509
E-4B	$6,407,524	$6,339,656
C-9A	$1,478,987	$1,674,745
C-9C	$1,511,841	$1,488,549
E-9A	$502,382	$797,853
KC-10A	$976,606	$1,431,072
C-12C/D	$388,321	$236,278
C-12F	$259,866	$297,236
C-20A/B	$1,555,139	$1,946,891
C-21A	$359,311	$277,695
C-23A	$222,351	N/A
VC-25A	$11,246,764	$16,402,075
C-27A	$1,806,519	$1,826,733
T/CT-43A	$1,118,683	$829,307
C-137B/C	$4,059,000	$4,701,551

Table 4 highlights how requirements change on a platform with time. Notice that many of the CPA LCC Factors tend to significantly differ from the yearly CPA Factors. Recall that these LCC Factors are weighted averages of all years for which data is available. These LCC Factors tend to smooth out yearly differences. So while the yearly factors may have been changing at greater rates, when all of them are combined using averaging, the changes are not as significant. The more years of cost data that are available, the less noticeable are the spikes that occur when requirements change. A good idea if one is contemplating using these factors is to compare these weighted averages to the yearly factors for the particular platform. If the yearly numbers are significantly higher, it might behoove the user to call FMPSC for an explanation. Quite possibly, a new contract was let with additional requirements that were not stated in the early years of the program.

Future Factor Developments:

As the Defense Budget continues to shrink, the use of CLS Cost Factors will continue to rise as possible areas for realignment are needed. The CLS Factors built by OC-ALC/FMPSC will receive more scrutiny and hopefully more use. The users of the current CLS Factors have mentioned areas that might make the factors more useful for what they need to do with them. One area that is being researched as this paper was written was the definitions given to variable and fixed costs.

An argument has been made that the definition given to variable costs used to calculate CPFH might not include all the variable costs. FMPSC realizes this but makes the definition of variable costs as used in the development of the factors well known. Since the ultimate goal of these factors is to have them used properly, efforts are under way to research the possibility of redfining variable costs for some platforms. This will entail meeting with the CLS PMs and discussing their current contracts. Those line items that can be redefined as being truly variable costs will be considered for inclusion in the next development of the CLS Factors.

One problem with this redefining of costs is that CLS contracts continually change. By defining costs the way FMPSC has defined them, one standard definition has been developed which is valid for all platforms. Once individual variable costs are defined for each platform, the task of understanding the factors becomes even more difficult. This problem could be compounded if a new CLS contract is let for a platform that defines costs differently than the old contract.

Another problem with this redefining of costs makes the calculation of the LCC factors obsolete. These factors are weighted averages of all the years for which CLS data was available. As contracts change, so do the definitions of certain line items. What may be considered variable in the future would have been shown as being fixed in prior years. Basically what

will occur is the adding of "apples and ornages". This will muddy the water and make the calculation of a LCC factor virtually impossible.

Future CLS Factor development may also include factors for Guard and Reserve platforms. This issue was raised at the Air Force Cost Analysis Improvement Group (AFCAIG) which convened on 23 Jun 93. FMPSC has never developed factors for these platforms so historical data might be hard to come by. It is unclear whether these platforms are managed under the same CLS contracts as the active duty aircraft which means costs might be shown on different line items than the active duty fleets. This area is being researched and at present the future is unknown. The basic methodology used would be the same for these Guard and Reserve aircraft, but a new learning process will occur since users of these factors will in most instances be people truly unfamiliar with the factors currently developed.

Summary

CLS is a method of providing logistics support to DoD owned assets. The CLS Cost Factors developed by OC-ALC/FMPSC only consider those AF assets funded with 3400 funds, EEIC 578, and/or DBOF. The management of these assets is performed at OC-ALC and if a person never comes to Tinker AFB OK, they may never know what CLS is. This paper has presented an overview of what CLS is, and the peculiarities of developing factors for platforms that are so different. The platforms run the gamut from a small training aircraft (T-1A) to an aerial refueler/cargo aircraft (KC-10) to small transportation aircraft (C-12C/D, C-12F, C-21A) to special mission platforms (E-4B) to VIP transport (VC-25A, C-137B/C). Each is managed with a different CLS concept and this compounds the misunderstanding of these Cost Factors.

As the future unfolds, new needs are being addressed and new requirements are being implemented. The process as it curerntly stands is a good one which may be refined as conditions warrant. It is hoped that as people become more familiar with the process used by OC-ALC/FMPSC, the factors will be used as they were intended to be used.

REFERENCES

AFR 800-21, Contractor Support for Systems and Equipment.

United States Air Force Joint Command Contractor Logistics Support Guide, Center for Supportability and Technology Insertion, HQ AFMC, Wright-Patterson AFB OH.

LISTING OF PLATFORMS FOR WHICH FACTORS WERE DEVELOPED

T-1A: A 2 engine Beech Commercial Type Business Jet. The AF will have an inventory of 180 in FY97 after final aircraft delivery. Used for pilot flight training. CLS Contract with McDonnell Douglas Training Systems.

E-4B: Boeing 747-200B Airliner, 4 General Electric F103-100 turbofan engines. The AF inventory is four aircraft. Air Combat Command uses the E-4B as the National Emergency Airborne Command Post. CLS contracts are with Boeing Aerospace Co. (Contractor Operated and Maintained Base Supply [COMBS], Tech Data, Engineering Services), ECI (Groundline Interface), Canadian Airlines (Engines).

C-9A: McDonnell Douglas DC-9 Series 30 Airliner powered by 2 Pratt & Whitney JT8D-9 turbofan engines. Current AF inventory is 20. They are used to support NATO and the MEDEVAC missions. CLS contracts are with Serv-Air (Site support), Lockheed Aeromod Center Inc. (Programmed Depot Maintenance), McDonnell Douglas (Engineering).

C-9C: Same as C-9A except it is used for Vice President and Cabinet level support.

E-9A: DeHavilland-8 transport powered by 2 Pratt & Whitney PW120A turboprop engines. The current Af inventory is 2 aircraft. It is a telemetry aircraft used by Air Combat Command on the Gulf of Mexico Test Range. Current CLS contract with King Aerospace Inc.

KC-10A: McDonnell Douglas DC-10 series 30CF aircraft powered by 3 General Electric CF6-50C2 turbofan engines. The AF inventory is 59 aircraft. It is used as an aerial refueler/cargo aircraft. Current CLS contract Douglas Aircraft Corp.

C-12C/D: Beechcraft Super King Air 200 powered by 2 Pratt & Whitney PT6A-42 turboprop engines. The D models have a larger cargo door and drop down oxygen in the cabin. The AF inventory is 2 aircraft used for training of crews who support DIA and DSAA. It is used for passenger/cargo transportation. The factors developed by OC-ALC/FMPSC used all 33 aircraft's costs. Current CLS contract with Beech Aerospace Services Inc.

C-12F: Same as the C-12C/D except is has a large cargo door on the port side. The AF inventory is 39 aircraft.

C-20A/B: A Gulfstream Aerospace Corporation Gulfstream III commercial business jet powered by 2 Rolls-Royce engines. The AF inventory is 13 aircraft. It is used for safe & secure transportation of NATO, and Cabinet level dignitaries. Current CLS contract with E-Systems Inc (CLS), and Gulfstream Aerospace Corp. (Engineering support).

C-21A: Gates Learjet 35A aircraft powered by 2 Garrett TFE731-2A turbofan engines. The AF inventory is 79 aircraft which are used for passenger/cargo transportation. Current CLS contract with Learjet Corp.

VC-25A: Boeing 747-200 series aircraft powered by 4 GE CF6-80C2-B1 turbofan engines. The AF inventory is 2 aircraft which are used for Presidential support. The current CLS contract is with Boeing Military Airplane Company.

C-27A: An Alenia Short Take-off and Landing (STOL) aircraft. The AF inventory is 10 aircraft used to support US Southern Command for airlift into remote areas. The current CLS contract is with Chrysler Technologies Airborne Systems (CTAS).

T/CT-43A: Boeing 737-200 powered by 2 Pratt & Whitney JT8D-9 turbofan engines. The AF inventory is 12 with 10 being used by Air Training Command (ATC) as navigator trainers. The current CLS contract is with Boeing Aerospace Company.

C-137B/C: Boeing 707-153B series aircraft powered by 4 Pratt & Whitney JT3D-3 turbofan engines. The AF inventory is 7 aircraft which are used to support the VIP mission. The current CLS contract is with E-Systems Inc.

COMPARISON OF PLATFORM BUDGET INPUTS

T-1A:

Flying Hour Program	Recurring Base Ops
Unscheduled Over & Above	Scheduled Over & Above
CDRL Data	Incentive
Program Support	COMBS Work-Around
Engineerng Support	Contractor Contingency
Manual & Technical	

Total line items: 11

Basic CLS Concept: Contractor (I-level, Depot level)
AF (O-level)

E-4B:

COMBS	Field Support
Data	Parts Repair
Bench Stock	Spares Transportation
Emer Repair/Unsched Maint	Engine Repair
Engineering/SIL	Ground Line Interface
PDM/Depot Maintenance Insp	Aircraft Mtn/TCTO/SB&AD
Modification Installs	Aircraft Paint Program
MPS SIL Integration	Eng Thrust Rev O/H
Program Support	

Total line items: 17

Basic CLS Concept: Contractor (Partial CLS)
AF (Partial AF support)

C-9A:

COMBS	Matl Support
Replen Spares	Eng Repair
Mod Install IV	Mod Install V
PDM & Paint	Drop-in Maint/CFT
Eng Overhaul	Hot Section Inspection (HSI)
Contractor Field Team	Out of Scope
Engineering	Technical Data
NORS Incentive	

Total line items: 15

Basic CLS Concept: Contractor (I-level, Depot level)
AF (O-level, I-level remove & replace)

C-9C:

COMBS	Matl Support
Replen Spares	Eng Repair
Mod Install IV	Mod Install V
PDM & Paint	Drop-in Maint/CFT
Eng Overhaul	Hot Section Inspection (HSI)
Contractor Field Team	Out of Scope
Engineering	Technical Data
NORS Incentive	

Total line items: 15

Basic CLS Concept: Contractor (I-level, Depot level)
AF (O-level, I-level remove & replace)

E-9A:

Aircraft Support	COMBS
Data	Over & Above
Refurbishment	Phase-in (New contract)

Total line items: 6

Basic CLS Concept: Contractor (I-level, Depot level)
AF (O-level)

KC-10A:

Flying Hour Program	COMBS
C-Checks	Contractor Field Serv Rep
Data (ISP, CDRL)	Mgmt Costs
Incentive	Paint
Landing Gear Overhaul	Contractor Travel
Damaged Component Repair	Material Transp Cost
Engine Overhaul	Over & Above
Engr Support Contract	Tech Order Contract
Mod Installs	HF Auto Comm Processor
Microwave Landing System	

Total line items: 19

Basic CLS Concept: Contractor (I-level, Depot level)
AF (O-level)

C-12C/D:

Aircraft Program	Engine Overhaul
Over/Above	Crash Damage
Refurbishment	A/C Condition Inspection
Service Life Extension	Engineering Services
Repaint	Site D/A
Hot Section Inspection	Program Support
Propeller Overhaul	Base Operations

Total line items: 14

Basic CLS Concept: Contractor (All levels)
AF (None)

C-12F:

Aircraft Program	Engine Overhaul
Over/Above	Crash Damage
Refurbishment	A/C Condition Inspection
Service Life Extension	Engineering Services
Repaint	Site D/A
Hot Section Inspection	Program Support
Propeller Overhaul	Base Operations

Total line items: 14

Basic CLS Concept: Contractor (All levels)
AF (None)

C-20A/B:

COMBS	Engineering Support
Logistics Data	Maintenance & Repair
Depot Level Maintenance	Field Support
Technical Order Update	Component Overhaul
Management Services	Engineering Task Assignment
Replenishment Benchstock	

Total line items: 11

Basic CLS Concept: Contractor (All levels A models, Partial B models)
AF (None A models, Partial B models)

C-21A:

Flying Hour Program	COMBS
CORE Inspection	HSI Inspection
Paint	12 Year Inspection
Mods	Program Support
Engineering	Over & Above

Total line items: 10

Basic CLS Concept: Contractor (All levels)
AF (None)

VC-25A:

Flying Hour Program	Management Services (COMBS)
Engineering Support	Tech Order Updates
Component Overhauls	Contractor/Vendor Support
Expense Items	Depot Level Maintenance
MCS Management Support	

Total line items: 9

Basic CLS Concept: Contractor (Partial)
AF (Partial)

C-27A:

Flying hour Admin Fee	Repair Costs
COMBS	Software Maintenance
Data	Tech Manuals
Engine Overhaul	Propeller Overhaul
Landing Gear Overhaul	Contractor Travel
Replen of Consumables	Program Support
APU Overhaul	Programmed Depot Maintenance

Total line items: 14

Basic CLS Concept: Contractor (O-level, I-level, Depot level)
AF (None)

T/CT-43A:

Flying Hour Program	COMBS
Programmed Depot Maint	HSI
Engine Overhaul	Program Support
Bench Stock	Over/Above
Tech Data	Orientation/Phase-in
Support Equipment Maint	Work Request
Acft Painting	Specific Components
Nonrecurring Expenses	Test, Disassembly, Inspection
Service Bulletins	Input Delivery of Acft
Engine Condition/Monitor	Transportation
Contractor Field Team	Travel
Engineering Support/Services	

Total line items: 23

Basic CLS Concept: Contractor (All levels)
AF (None)

C-137B/C:

Depot Level Maint	Engine Overhaul
Program Support	Management Services
Engineering Services	Field Service Team
Component Overhaul	Replen Benchstock
Tech Order Updates	

Total line items: 9
Basic CLS Concept: Contractor (Partial)
AF (Partial)